

## REGISTRATION DETAILS:

Registration Fee: Rs. 300 (GST included)

Registration link:  
<https://vitennaevents.com/>

## DATES TO REMEMBER

Last date for applying : 25<sup>th</sup> January 2021

Confirmation to the participants : 30<sup>th</sup> January 2021

\*E-Certificate will be provided to registered participants only.

## ADDRESS FOR COMMUNICATION

**Dr. Lucky Agarwal**  
Assistant Professor (SG-II)  
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**Dr. Kaustab Gosh**  
Associate Professor (Sr.)  
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## ONLINE MEETING

Participants are requested to attend the online sessions and discussion over ZOOM. The detailed schedule and meeting links would be sent to individual participants by an email after the completion of registration and payment process.

## VIT CHENNAI

VIT for the past 36 years has made a mark in the field of higher education in India imparting quality education in a multicultural ambience, intertwined with extensive application-oriented research. VIT was established with the aim to provide quality higher education on par with International Standards.

It persistently seeks and adopts innovative methods to

improve the quality of higher education on a consistent basis. VIT was established by a well-known educationalist and former parliamentarian, Dr. G. Viswanathan, Founder and Chancellor, a visionary who transformed VIT into a center of excellence in higher technical education. Govt. of India recognized VIT as an Institution of Eminence (IoE). ARIIA, Govt. of India recognized VIT as a No. 1 Private University for Innovation. MHRD, Govt. of India ranked VIT as No.15 among the Engineering Institutions (NIRF-2020 ranking). VIT Chennai is ably spearheaded by Mr. Sankar Viswanathan, Vice President, Ms. Kadhambari S Viswanathan, Assistant Vice President, Dr. Rambabu Kodali, Vice-Chancellor and Dr. V. S. Kanchana Bhaaskaran, Pro- Vice-Chancellor. They share in the mission to make VIT a global center. The focus is:

- To maximize the industrial connectivity
- To create Centers of Excellence in contemporary areas of research
- To enrich technological and managerial human capital nurtured in a multicultural ambience
- To provide a common platform for the agglomeration of ideas of personnel from various walks of life for learning enrichment
- To create opportunities and exploit the available resources to benefit industry/society
- To encourage participation in the National Agenda of knowledge building
- To foster international collaborations for mutual benefits in areas of research
- To maximize the Industrial connectivity
- To create Centers of Excellence in contemporary areas of research
- To enrich Technological and Managerial Human Capital nurtured in a multicultural ambience

VIT – A Place to learn; A Chance to grow  
VIT – Recognized as an Institute of Eminence (IoE)



**VIT**<sup>®</sup>  
Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

**Chennai**

*Presents*

**Online Faculty Development  
Programme  
On**

**Advanced Materials for a new  
generation of Nanoelectronic Devices  
(AMND-2021)**

**February 5<sup>th</sup>-8<sup>th</sup>, 2021**

*Coordinators*

**Dr. Lucky Agarwal**  
SENSE, VIT Chennai

&

**Dr. Kaustab Ghosh**  
Centre for Nanoelectronics and VLSI Design  
VIT Chennai



## ABOUT SENSE

The School of Electronic Engineering (SENSE) at VIT Chennai was established in 2010 when this campus was set up in Chennai. The School offers two B.Tech. programmes, one in Electronics and Communication Engineering and the other in Electronics and Computer Engineering. It also offers two M.Tech programmes, one in Embedded Systems and the other in VLSI Design. In addition, Ph.D. research programme is offered in the areas of Electronics, Communication and Computer Engineering and their allied fields.

The School has modern state-of-the-art laboratories in the areas of Semiconductor Devices, Micro and Nano Devices, Analog Circuit Design, Digital System Design, Digital Signal Processing, Embedded Systems and Architecture, Microprocessors and Microcontrollers, Communication Engineering, Wireless Technologies, Internet of Things (IoT), Microwave and Optical Communication, Computer Networks and Advanced VLSI Design.

## ABOUT THE PROGRAM

The Vellore Institute of Technology Chennai, is organizing an Online Faculty Development Program on Advance Material for Next Generation nano-electronic devices from February 5th to 8th, 2021. The main objective of this program is to provide the details of critical concepts in understanding the state-of-the-art in fabrication and modelling of advanced material for semiconductor devices (applications). It will also cover the concepts from fundamentals to advanced level, giving thrust in nanoelectronics. The topics will focus on basics, advances and applications to benefit people from academic & research communities associated with Electrical, Electronics, Computer Science, Chemistry, Physics, background.

## HIGHLIGHTS:

- ✦ This FDP mainly focuses on the synthesis of semiconductor materials and devices for the applications in memory, sensors, etc.
- ✦ Device modelling and simulation of nanoelectronics devices.
- ✦ It will provide a detailed overview of new materials required for fabrication of advanced semiconductor devices such as Tunnel FET, Thin-Film Transistor (TFT), Solar Cells and MEMS, Optoelectronic Devices etc.
- ✦ Fabrication and Characterization technique.
- ✦ Sessions will be there in the morning and afternoon throughout the FDP.

## TOPICS:

- ✓ Nano-materials and devices
- ✓ Advanced transistor technologies
- ✓ Wide bandgap semiconductor devices
- ✓ Self-heating in nanoscale devices
- ✓ Basics & Recent developments in Photonics & related devices
- ✓ Current status, recent advances, and next-generation innovations in Photovoltaic Cells.
- ✓ Sensor basics, and their roles in high-end (biomedical & others) applications
- ✓ Modelling of Solar Cells
- ✓ Simulation of nanoelectronic devices
- ✓ Fabrication and characterization technique

## RESOURCE PERSONS:

- ❖ Prof. P. Chakrabarti (Director, IEST Shibpur)
- ❖ Prof. S. Jit (Professor, IIT-BHU)
- ❖ Dr. N N Murty (Associate Professor, IIT Tirupati)
- ❖ Dr. Bratindranath Mukherjee (Asst. professor, IIT BHU)
- ❖ Dr. Shweta Tripathi (Asst. Professor, MNNIT Allahabad)
- ❖ Dr. Gopal Rawat (Asst. Professor, NIT Hamirpur)
- ❖ Dr. Sree Venkata Narayana Pammi (CNU, Korea)
- ❖ Dr. Subrata Ghosh (The University of Manchester, UK)
- ❖ Dr. Yadagiri Karampuri (Shanghai Tech University, China)
- ❖ Dr. Nilanjan Halder (Associate Professor, Manipal University, Jaipur)
- ❖ Dr. Satya Sopan Mahato, (Associate Professor, National Institute of Science and Technology, Odisha)
- ❖ Dr. Tushar Dhabal Das, (Asst. Professor, NIT Arunachal Pradesh, India)
- ❖ Dr. Kaustab Ghosh, (Associate Professor (Senior), VIT Chennai, India)
- ❖ Dr. B. Prashanth Kumar, (Asst. Professor, VIT Chennai, India)